

Maryland Pandemic Influenza Summit
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Maritime Institute

Maryland Pandemic Influenza Preparedness Planning



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Goal: A Balanced Approach

Inspire Preparedness Without Panic

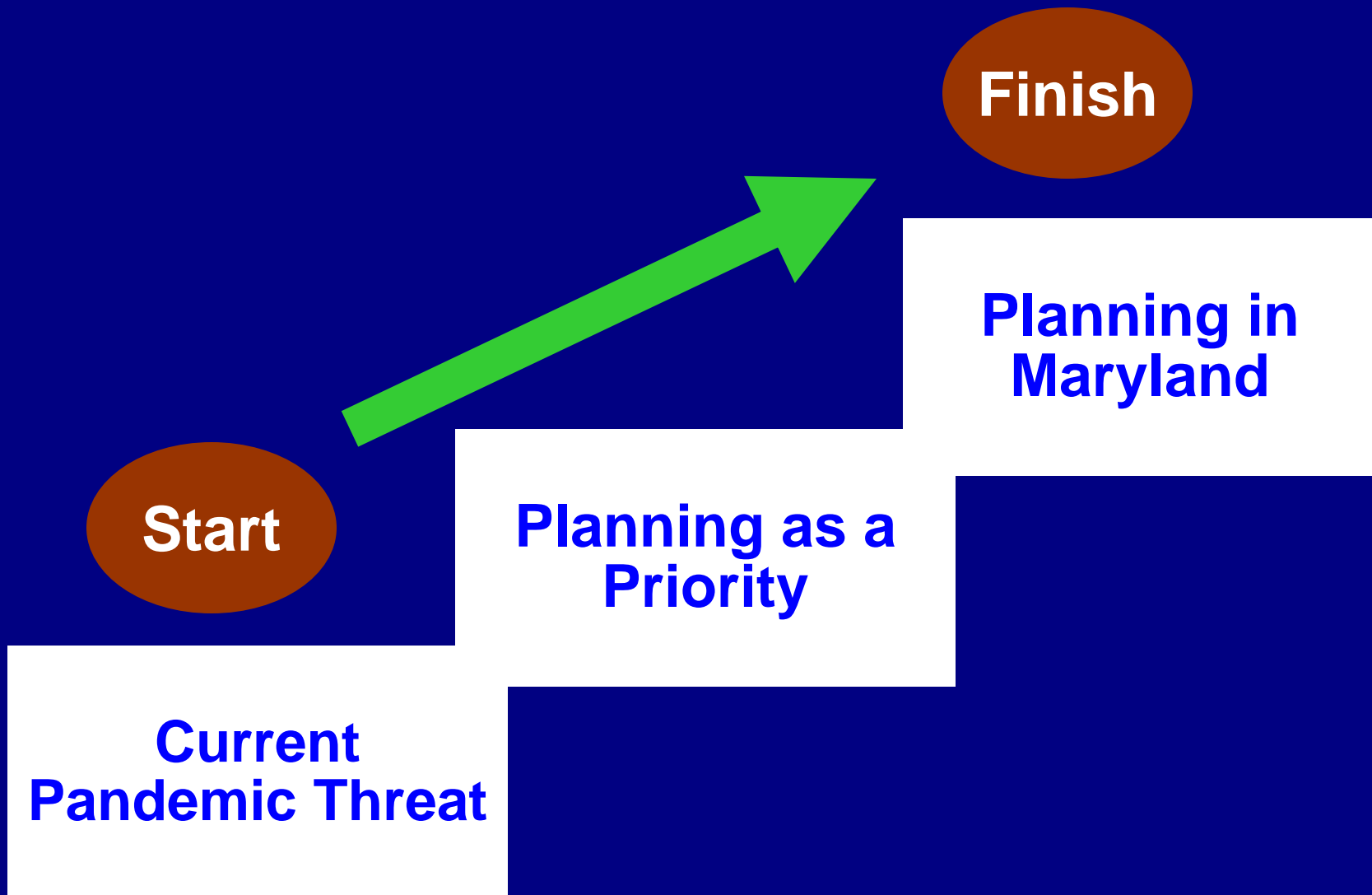


“It can’t happen. There’s nothing we can do about it.”



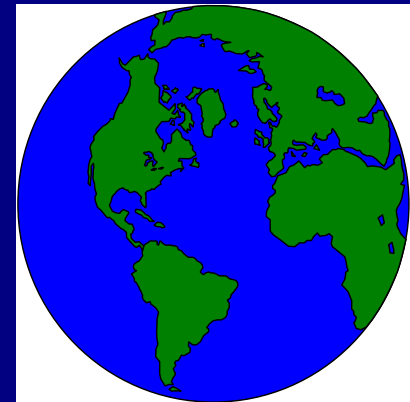
“The sky is falling... We’re all going to die!”

Outline of Presentation



Pandemic Influenza

- Is a worldwide outbreak
- Occurs when following conditions are met:
 - A new virus
 - Susceptible population
 - Ability of virus to cause disease
 - Ability of virus to spread easily from person-to-person



Avian Influenza H5N1 in Birds

- Dec 2003 – Ongoing
- Unprecedented rapid spread of H5N1 across East Asia and into Europe, Siberia, Central Asia, and Africa
- Affecting domesticated fowl and wild birds
- Most severe outbreak ever recognized; over 150 million birds died or depopulated



Avian Influenza H5N1 in Humans

- Dec 2003 – Ongoing
- 170 human cases, with 92 (~50%) deaths*
- Cases in Vietnam, Indonesia, Thailand, China, Turkey, Cambodia, Iraq
- Most cases have involved direct contact with poultry or contaminated surfaces
- Limited person-to-person spread



*As of February 20, 2006

Pandemic Threat of H5N1

- **Good news:**

No evidence that H5N1 virus can easily spread from person-to-person

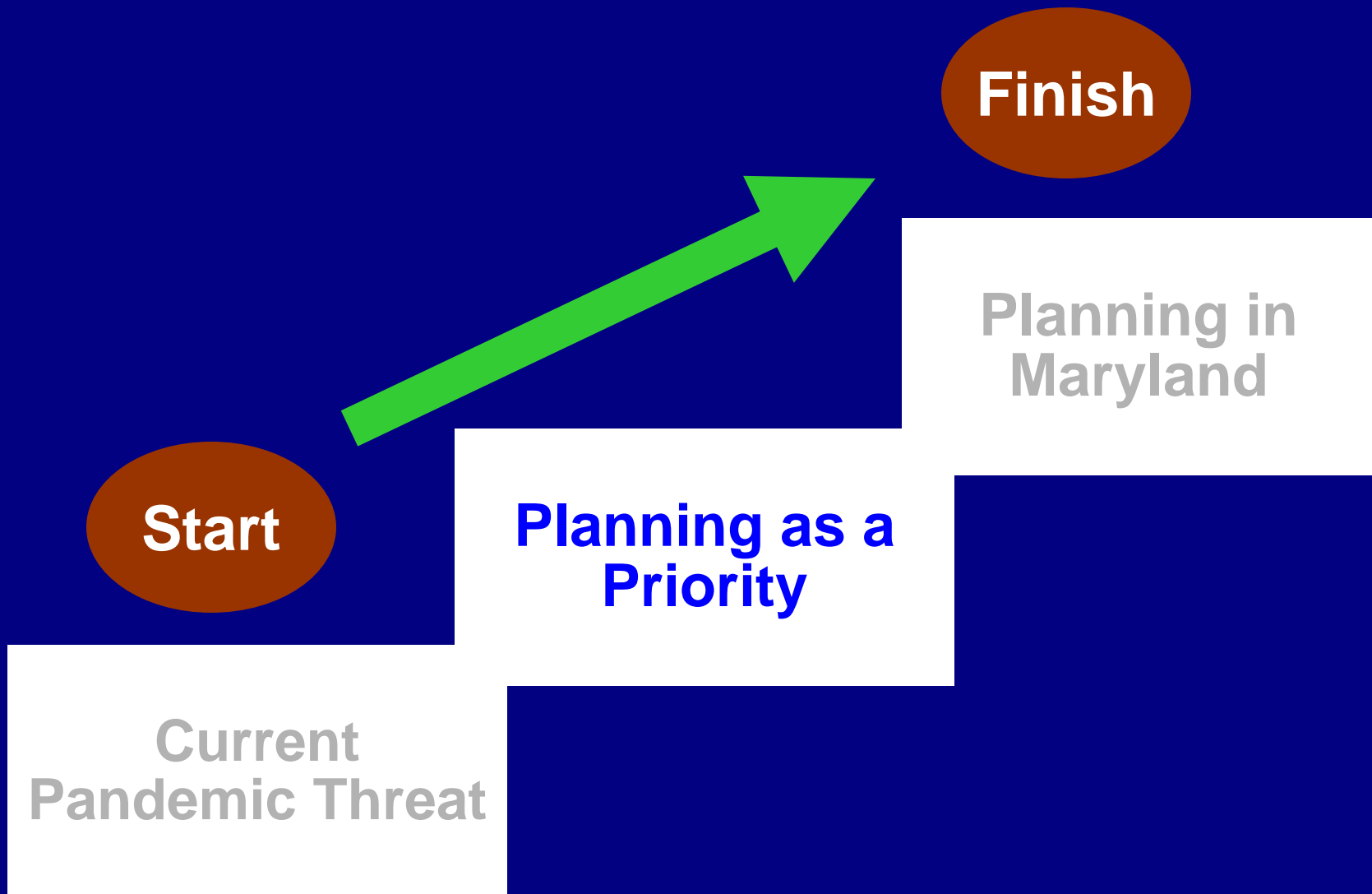
- **Bad news:**

- H5N1 viruses are circulating widely among poultry in Asia, and cannot be eradicated in near future
- H5N1 infections of humans, although uncommon, have resulted in severe illness and high death rate
- H5N1 viruses continue to evolve and have potential to result in a pandemic

Risk to Maryland from H5N1 Avian Influenza Outbreak

- **Current risk to Americans, including Maryland residents is low**
- **The strain of H5N1 virus found overseas has not been found in the U.S.**
- **There have been no human or poultry cases of H5N1 influenza in the U.S.**
- **Potential routes of introduction into Maryland include via an infected traveler, migration of infected wild birds, illegal importation of infected birds**

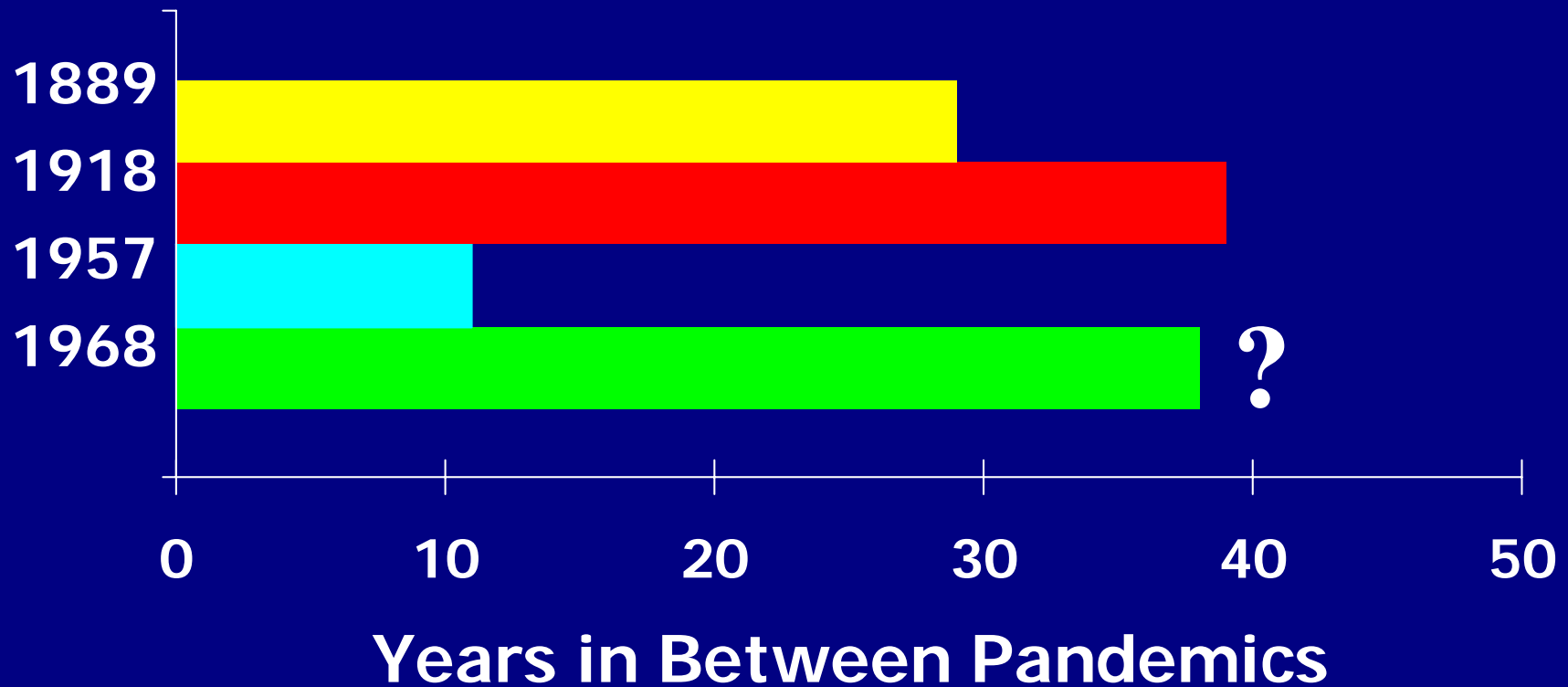
Outline of Presentation



Pandemic Influenza Planning: A High Priority

- **Experts consider another pandemic inevitable**

Time Interval Between Influenza Pandemics



Pandemic Influenza Planning: A High Priority

- **Experts consider another pandemic inevitable**
- **Little warning before pandemic strikes**

1918

2006

World Population

1.8 Billion

6.5 Billion

**Primary Mode of
Transportation**

**Ships,
Railroad**

**Jet airplane,
Automobile**

**Time for Virus to
Circle the Globe**

Months

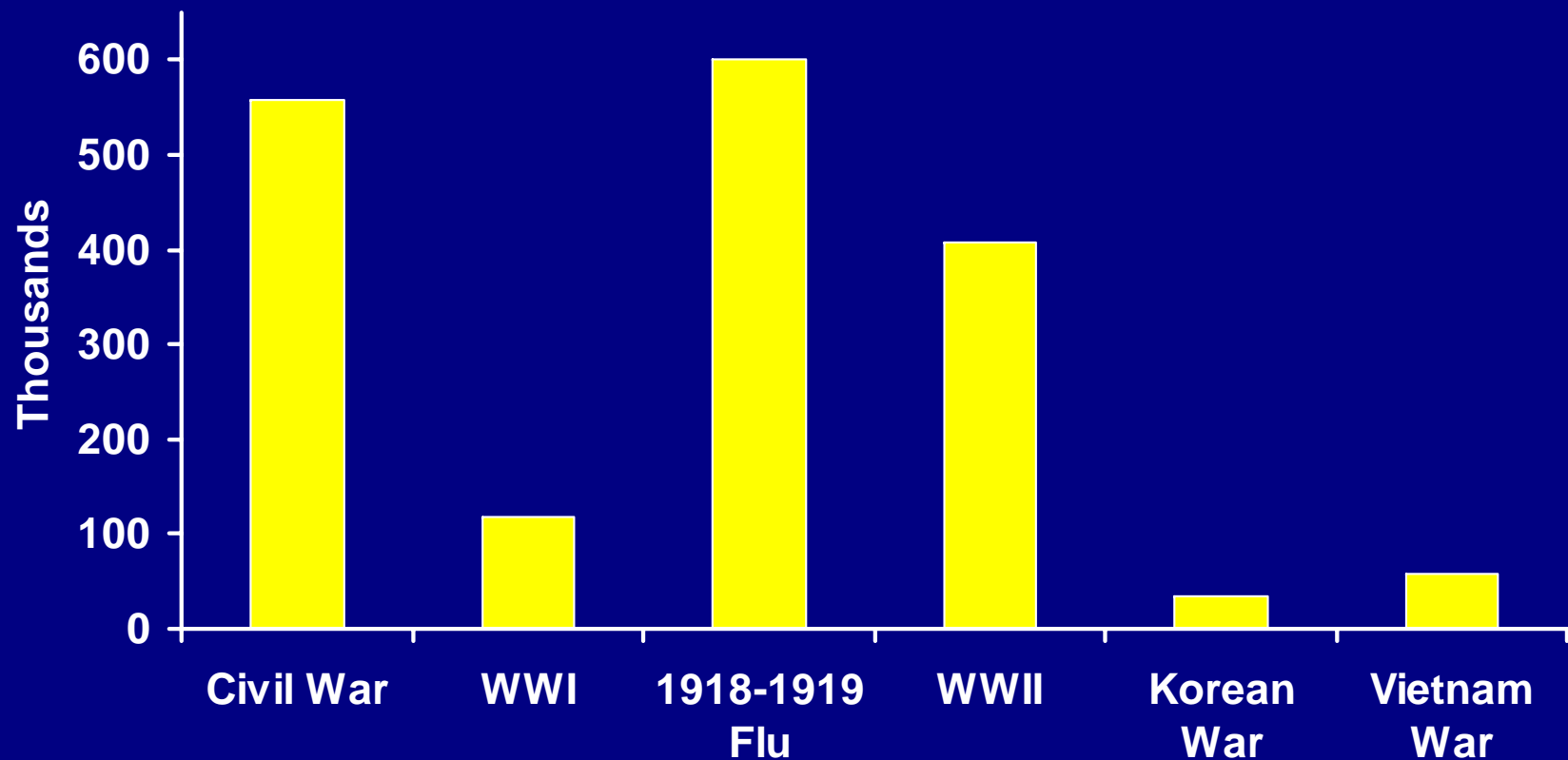
Days

Pandemic Influenza Planning: A High Priority

- Experts consider another pandemic inevitable
- Little warning before pandemic strikes
- Impact of next pandemic could be severe



America's deaths from 1918 influenza pandemic were greater than the number of U.S. servicemen killed in any war



Impact on Maryland of a Moderate and Severe Influenza Pandemic*

Characteristic	Moderate (1957-like)	Severe (1918-like)
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Illness	1,667,400 (30%)	1,667,400 (30%)
Outpatient Care	833,700	833,700
Hospitalization	16,000	183,400
Death	3,900	35,300

* Estimates based on extrapolation from past pandemics in the United States. Note that these estimates do not include the potential impact of interventions not available during the 20th century pandemics.

Pandemic Influenza Planning: A High Priority

- Pandemic will be widespread, with many geographic areas affected simultaneously, preventing shifts in resources
- Effect on individual communities will be relatively prolonged – 6 to 8 weeks



Pandemic Influenza Planning: A High Priority

- Pandemic will pose significant threats to work force responsible for critical community services due to widespread absenteeism (up to 30%)
- Effective preventive and therapeutic measures (vaccines and antiviral agents) will likely be in short supply

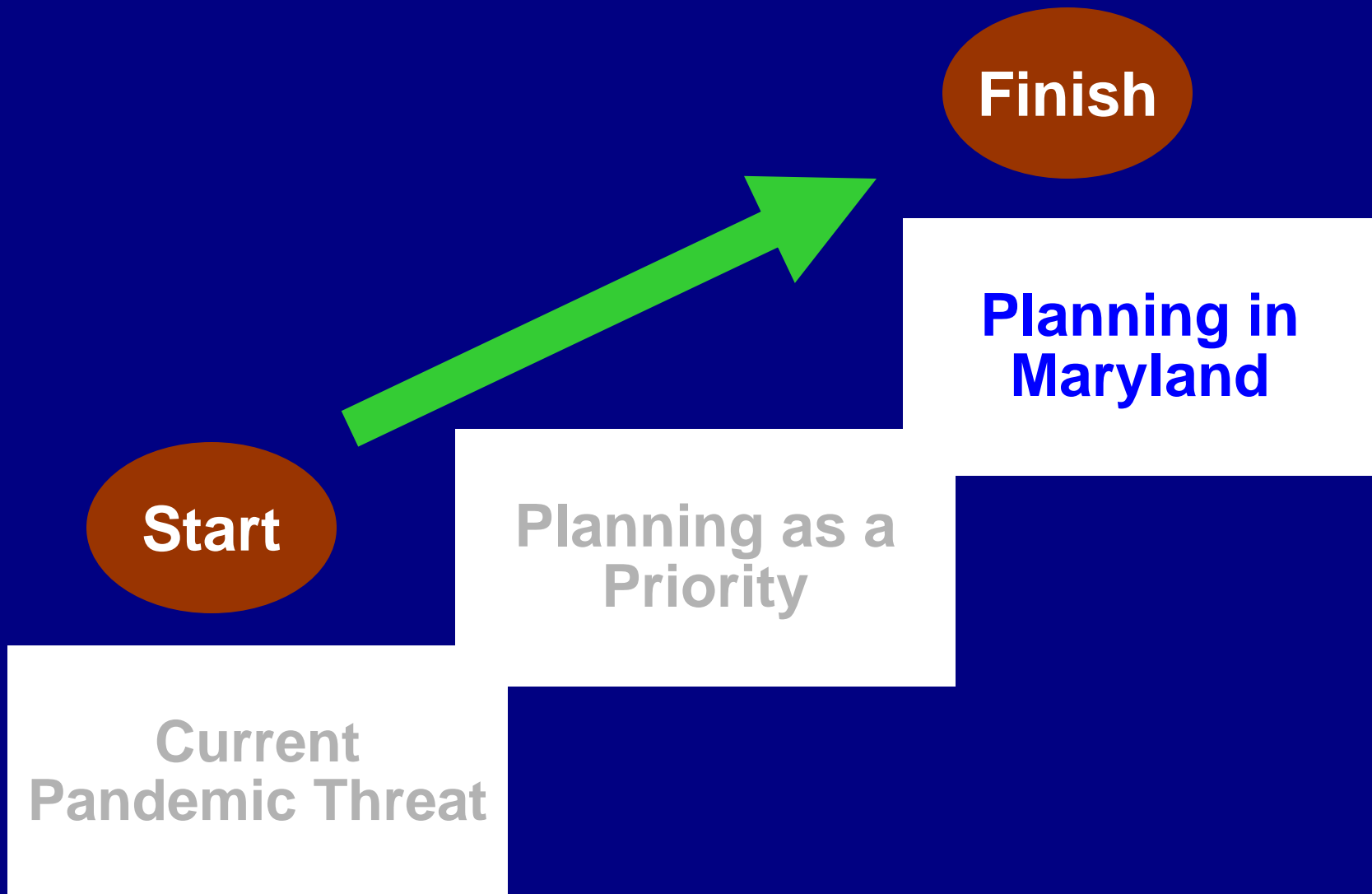


Pandemic Influenza Planning: A High Priority

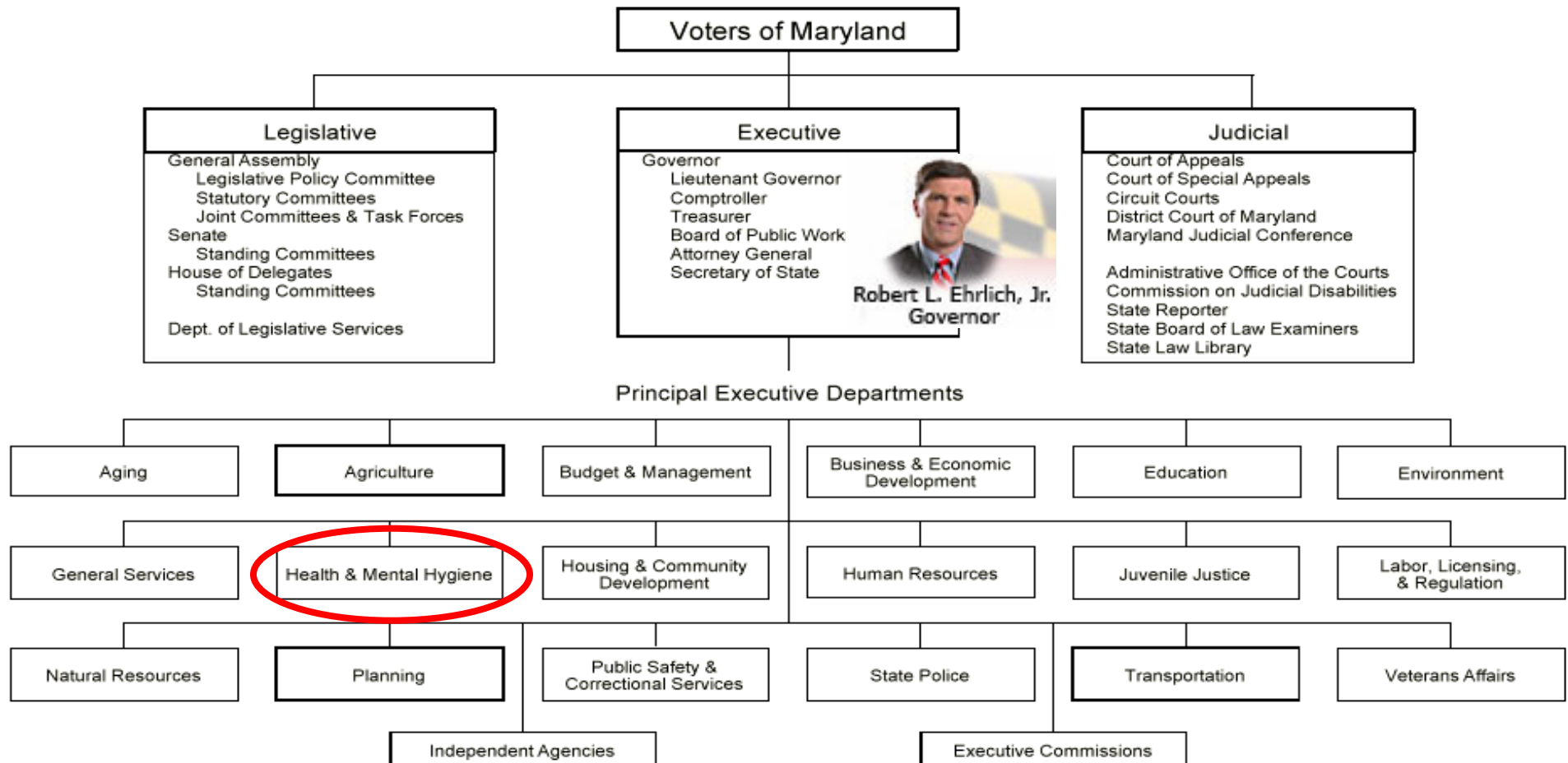
- Inevitable
- Sudden
- Widespread
- Potentially severe



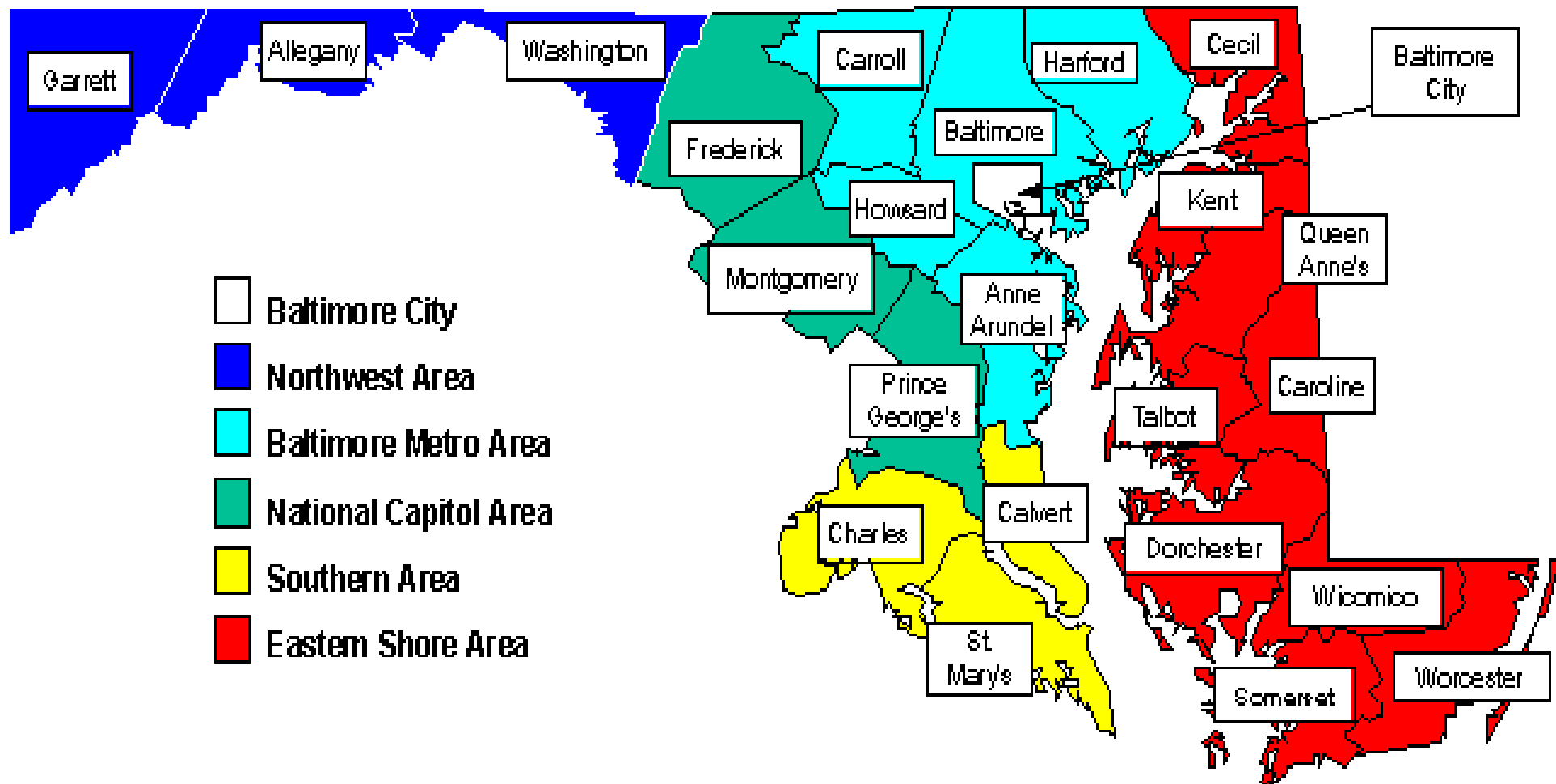
Outline of Presentation



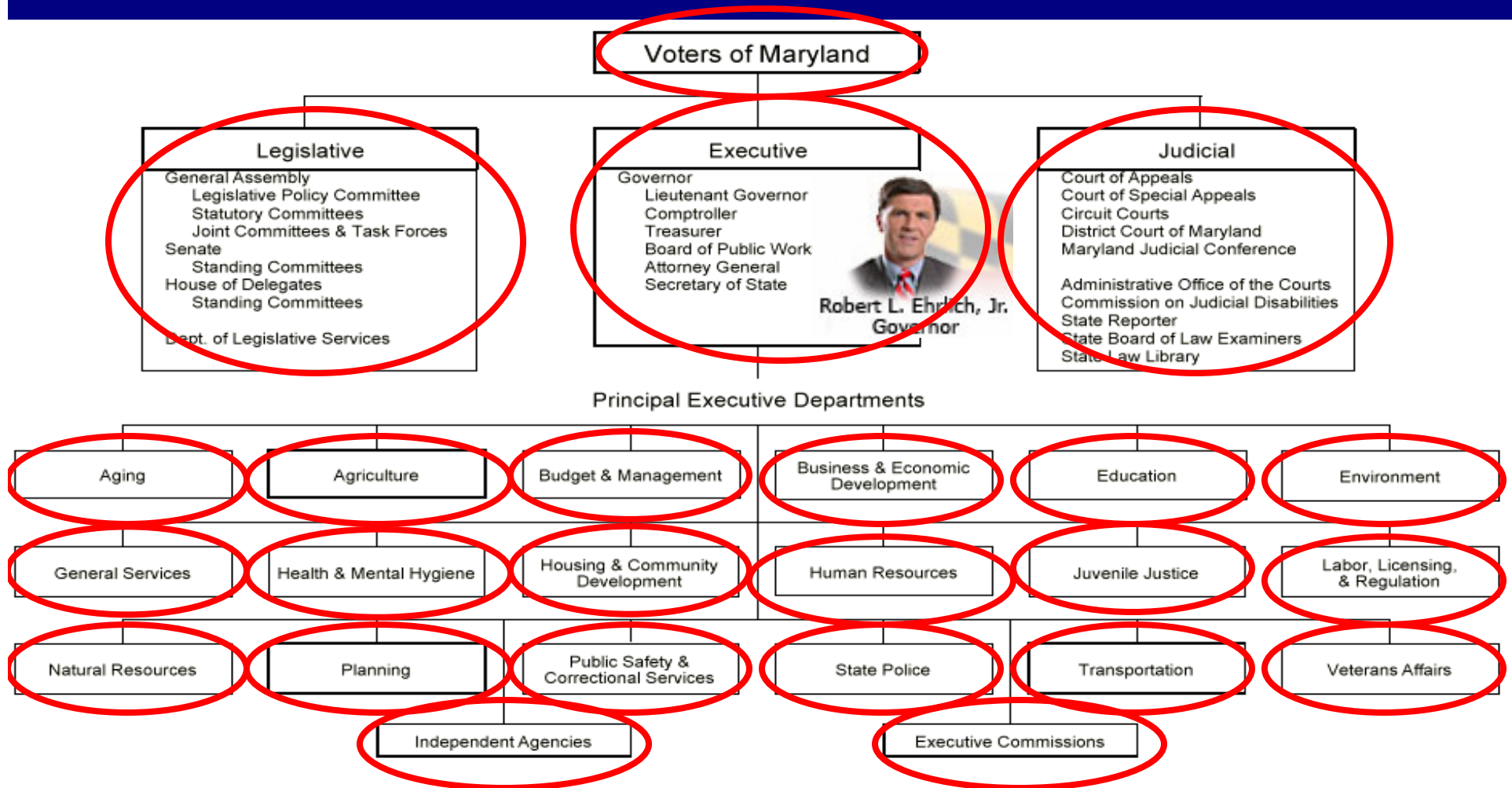
Overview of Maryland State Government



Maryland Local Health Departments



Overview of Maryland State Government

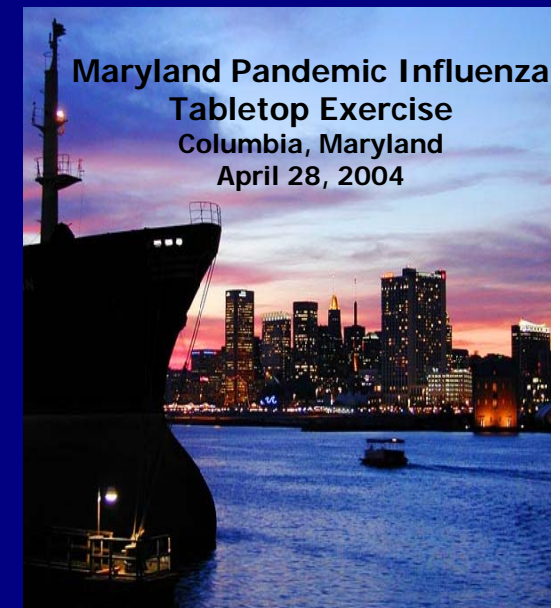


Preparedness and Response Goals In Maryland

- Prevent/Delay introduction of pandemic into Maryland
- Slow spread of pandemic once in Maryland
 - Reduce illnesses
 - Reduce deaths
- Sustain infrastructure and mitigate social and economic impact of pandemic

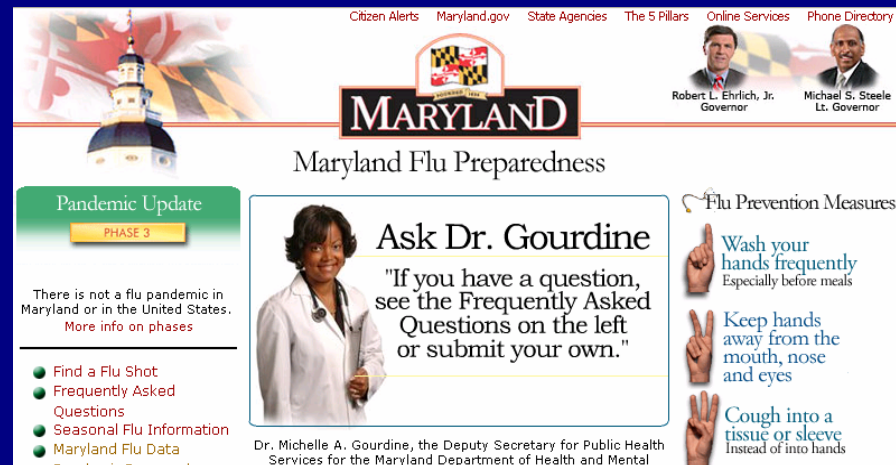
Preparing for an Influenza Pandemic in Maryland

- Initiated formal planning for pandemic in 1999
- Developed pandemic influenza response plan
- Conducted several conferences and tabletop exercises
- Provided educational training for various public school systems



Preparing for an Influenza Pandemic in Maryland

- Developed a poultry worker protection plan
- Provided guidance on which patients to test for H5N1
- Assessed hospital bed capacity
- Produced new website at flu.maryland.gov



Preparing for an Influenza Pandemic in Maryland

Maryland uses several methods to detect for signs of a future pandemic:

- Syndromic surveillance collects information about illnesses in Maryland emergency room patients
- Sentinel health care providers report number of influenza-like illnesses they diagnose
- Hospitals report health care workers hospitalized with pneumonia



Preparing for an Influenza Pandemic in Maryland

Maryland uses several methods to detect for signs of a future pandemic:

- Hospitals report hospitalizations and deaths in children who test positive for influenza
- Clinical labs report to DHMH lab evidence of influenza
- DHMH lab tests for various influenza strains, including H5N1



Preparing for an Influenza Pandemic in Maryland

Maryland uses several methods to detect for signs of a future pandemic:

- Maryland shares information with other regional and national public health partners to monitor influenza activity during normal influenza season



Control Measures in a Pandemic

- Antiviral agents and vaccine (once available)
- Personal hygiene and health
 - Hand washing
 - Cover your cough
 - Stay home if ill
- Isolation of sick people
- Quarantine of exposed, healthy people
- Measures to increase “social distance” such as canceling mass gatherings, closing schools
- Limiting spread of infection by travelers





Unresolved Issues

- Civil order in context of scarce resources or overwhelming outbreak
- Provision of basic needs to homebound or sick persons
- Economic fallout
- Closings of schools and businesses
- Continuity of operations
 - Government
 - Businesses

Unresolved Issues

- Health care systems surge capacity
- Isolation and quarantine issues
- Mortuary capacity
- Other Issues



Conclusion

- Threat of another influenza pandemic is real
- Maryland has a pandemic influenza response plan; substantial progress has been made
- Maryland continues to monitor for signs of a possible influenza pandemic
- Preparing for an influenza pandemic requires coordinated action at all levels of government – federal, state, local – and all sectors of society, including businesses, schools, medical community and others